State of Montana
Montana State Library

Agency IT Plan
Fiscal Year 2012-2017

May 2012

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Information technology (IT) is an essential resource required for the Montana State Library (MSL) to meet its mission and statutory requirements. IT is integrated into nearly every function of the State Library, from the creation and storage of digital content to the delivery of library services and data in numerous forms. The programs of the library rely heavily on the State network, on MSL's servers and file storage, on library partners that provide e-Content and on Internet technologies to support our business goals.

Current Business Drivers

The maintenance and development of MSL information systems are directly tied to current and planned business needs which include but are not limited to the following:

- Limited and/or reduced personnel and financial resources means that MSL must find efficiencies in order to continue to maintain or improve services to meet user demands.

- Following the recommendation of the Governor's GIS Taskforce, the Montana Natural Resource Information System (NRIS) and the Base Map Service Center, formerly a program of the State Information Technology Services Division, are merging.

- The Library Information Services (LIS) program is engaged in a long-term project to digitize our entire print state publications legacy collection (37,000 volumes).

- The Talking Book Library (TBL) is gradually converting its collection of books on tape from analog to digital media to meet user demands and to remain current with TBL's national counterparts.

- The Statewide Library Resources (SLR) Division continually seeks ways to meet rising library patron demands by increasing available e-Content services. SLR facilitates access to online content or e-Content for Montana libraries through statewide subscriptions for online databases, downloadable e-resources services, and other online resources. The division is now actively engaged in the world of social media as a way to further facilitate communication with library patrons and partners.

- While MSL has begun the process to co-locate some servers and online services with other state agencies in the State of Montana Data Center (SMDC), we face the near-term problem of upgrading and maintaining our web servers and file storage needs in a way that is affordable given our limited fiscal resources.

To meet these current business needs along with the overall needs of the agency, MSL developed the following IT goals and objectives for the period 2012-2017:

IT Goal 1   Align information system resources with MSL program and service needs

Objective 1-1   Continue to evaluate information system resources currently maintained by MSL and the BMSC, now a program of MSL, against MSL program and service needs to find opportunities for greater efficiency

Objective 1-2   Evaluate external IT resources against MSL program and service needs

Objective 1-3   Use the agency work plan process to identify priorities for new and/or expanded information systems

Objective 1-4   Encourage staff from all library programs to effectively collaborate across programs in order to use all library information system resources to meet the goals of MSL

IT Goal 2   Develop and maintain current and new information systems that are properly aligned with MSL program and service needs

Objective 2-1   Maintain the MSL information technology plan

Objective 2-2   Participate in IT governance

Objective 2-3   Consult with Department of Administration when evaluating new information systems to support the MSL Strategic Plan

Objective 2-4   Comply with all relevant Enterprise IT standards and policies that align with MSL business needs and support MSL programs and services

Objective 2-5   Implement Project Management as a means to proactively manage information systems and projects

Objective 2-6   Proactive management of hardware and software assets

IT Goal 3   Expand and improve online information services

Objective 3-1   Improve the overall design and usability of MSL websites and services

Objective 3-2   Participate in formal State activities that actively support online service delivery

Objective 3-3   Collaborate with partners on projects and services which increase citizen access to public information and library content

Objective 3-4   Provide online interfaces that enable partners to contribute feedback regarding MSL projects and services as well as content to MSL collections

Objective 3-5   Create and deliver web services to serve MSL data and the data of MSL partners

ITG 4   Develop business continuity and security programs

Objective 4-1   Implement a NIST-compliant Information System Security Program

Objective 4-2   Use D-Plan (http://www.dplan.org/) to develop an agency wide disaster recovery plan

ITG 5   Improve MSL's ability to attract and retain a qualified IT workforce.

Objective 5-1   Use IT staff in ways that support the MSL Strategic Plan and promote opportunities for collaboration and cross-training both among internal colleagues as well as with MSL partners

Objective 5-2   Develop MSL IT staff through investment in training and professional development. Implement training plans for employees that align with MSL's projected information system needs.

Additionally, the Montana State Library may seek one-time only funds through the executive planning process to fund a rapid process to complete our on-going state publications digitization project.

SECTION 1: AGENCY ADMINISTRATIVE INFORMATION

Role: Plan Owner

Name:	Jennie Stapp
Telephone Number:	444-3116
Email Address:	Jstapp2@mt.gov

Role: IT Contact

Name:	Jennie Stapp
Telephone Number:	444-3116
Email Address:	Jstapp2@mt.gov

Role: IT Contact (Alternate)

Name:	Lucinda Phillips
Telephone Number:	444-0537
Email Address:	lphillips@mt.gov

Role: Information Security Manager (ISM)

Name:	Jennie Stapp
Telephone Number:	444-3116
Email Address:	Jstapp2@mt.gov

IT Inventory

The IT inventory database located at http://mine.mt.gov/enterpriseitinventory was or will be updated on May 1, 2012,   As required by MCA 2-17-524(3)(c) the plan will be updated by June 30th, 2012.

SECTION 2: AGENCY IT MISSION

The Montana State Library is committed to strengthening libraries and information services for all Montanans through leadership, advocacy, and service.

IT is an essential resource required for MSL to meet its mission and statutory requirements. IT is integrated into nearly every function of the State Library, from the creation and storage of digital content to the delivery of library services and data in numerous forms. The programs of the library rely heavily on the State network, on MSL's servers and file storage, on library partners that provide e-Content and on Internet technologies to support our business goals.

Current Business Drivers

The maintenance and development of MSL information systems are directly tied to current and planned business needs which include but are not limited to the following:

- Limited and/or reduced personnel and financial resources means that MSL must find efficiencies in order to continue to maintain or improve services to meet user demands; there are efficiencies to be gained by strategically planning future MSL goals and objects and by aligning information systems to support those goals and objectives.

- Following the recommendation of the Governor's GIS Taskforce, the Montana Natural Resource Information System (NRIS) and the Base Map Service Center, formerly a program of the State Information Technology Services Division, are merging. This process requires careful planning to ensure that IT resources are used as efficiently as possible given limited financial resources, while continuing to ensure that Montana's GIS users' needs are met and exceeded.

- The Library Information Services (LIS) program is engaged in a long-term project to digitize our entire print state publications legacy collection (37,000 volumes).

- The Talking Book Library (TBL) is gradually converting its collection of books on tape from analog to digital media to meet user demands and to remain current with TBL's national counterparts. This will require storage solutions that can accommodate increased storage demands for new digital content and network resources to facilitate the downloading of digital content from the National Library Service.

- The Statewide Library Resources (SLR) Division continually seeks ways to meet rising library patron demands by increasing available e-Content services. SLR facilitates access to online content or e-Content for Montana libraries through statewide subscriptions for online databases, downloadable e-resources services, and other online resources. The division is now actively engaged in the world of social media as a way to further facilitate communication with library patrons and partners. SLR partners with library vendors and organizations and facilitates the creation of cooperatives and consortia of libraries around the state. These partnerships create value-added opportunities at reduced costs to libraries for resources, training and consulting services to libraries throughout the state.

- While MSL has begun the process to co-locate some servers and online services with other state agencies in the State of Montana Data Center (SMDC), we face the near-term problem of upgrading and maintaining our web servers and file storage needs in a way that is affordable given our limited fiscal resources.

SECTION 3: AGENCY REQUIRED PROGRAMS

Information Security Management (ISM) Program General Description

Aided by the State Information Technology Services Division, MSL is in the process of implementing an agency-wide information security management program compliant with §2-15-114, MCA and State Information Technology Systems Division *Information Security Programs* policy with adoption of the National Institute of Standards and Technology (NIST) Special Publication 800 series as guides for establishing appropriate security procedures. This is in alignment with the State of Information Technology Service's direction for an enterprise approach to protect sensitive and critical information being housed and shared on State and/or external/commercial information assets or systems.

As described in NIST SP 800-39, the agency will develop and adopt the Information Risk Management Strategy to guide the agency through information security lifecycle architecture with application of risk management. This structure provides a programmatic approach to reducing the level of risk to an acceptable level, while ensuring legal and regulatory mandates are met in accordance with MCA §2-15-114.

Future Security Program Plans

MSL's information security management program is challenged with limited resources; manpower and funding. MSL IT staff and managers are currently meeting with SITSD Security Analysts to review current security strategies.   With the help of the State Information Security Management Program, MSL will identify specific vulnerabilities which may require new policies, procedures, equipment, and/or personnel positions.

Continuity of Operations (COOP) Capability Program General Description

In 2010-2011 MSL staff completed an initial disaster recovery plan using the cultural institution planning tool, D- Plan. More work needs to be done to prioritize needs outlined in this plan for recovery within the agency, to assign specific staff to critical disaster recovery roles and to align the plan with SITSD's Continuity of Operations Program. MSL staff has completed initial training on SITSD's Living Disaster Recovery Planning System (LDRPS) which will provide the plans and structure to facilitate response and recovery capabilities to ensure the continued performance of the State Essential Functions of Government. This program involves two Blocks of focus; the first is to complete the Business Continuity Plans (BCP), the second Block works on the specific business processes or activity plans such as MSL's Emergency Action Plans (EAP), and disaster recovery plan. This program is not a standalone process in that information which is identified and recorded under this structure can and often exists in the Records Management Program and associates with Information Security Management Program requirements.

Future COOP Program Plans

MSL's continuity of operations capability program is challenged with limited resources; manpower and funding. Over this strategic period and within existing resources, MSL plans to complete and test our disaster recovery plan and to more fully align our documented disaster recovery plan with LDRPS.

Goal Number 1: Goal Number 1: Align information system resources with MSL program and service needs

IT Goal 1   Align information system resources with MSL program and service needs

Description: This on-going goal aligns current information system resources with MSL program and service needs and appropriately deploys information technology solutions within the scope of MSL strategic plan and personnel and financial resources.

Benefits: MSL staff benefit by having the resources we need to carry out our work without overextending limited personnel and financial resources. MSL partners and patrons benefit by having reliable access to high quality content and services. Montana taxpayers benefit through tax savings associated with appropriate use of IT in government.

Which state strategic goal(s) and/or objective(s) does your goal address? 1, 2, 3, 4, 5

Supporting Objective/Action

Objective 1-1   Continue to evaluate information system resources currently maintained by MSL and the BMSC, now a program of MSL, against MSL program and service needs to find opportunities for greater efficiency

Business driver: Limited and/or reduced personnel and financial resources means that MSL must find efficiencies in order to continue to maintain or improve services to meet user demands; there are efficiencies to be gained through thorough evaluation of current IT resource deployment.

Risks: None

Timeframe: Ongoing

Critical success factors:

- MSL will consolidate of redundant hardware; migrate to virtual servers where possible;

- MSL will evaluate available personnel and financial resources;
- MSL will purchase new hardware only when there is a clear program or service need that cannot be met with current infrastructure and if MSL has the resources to support additional infrastructure;

Supporting Objective/Action

Objective 1-2   Evaluate external IT resources against MSL program and service needs

Business driver: Limited and/or reduced personnel and financial resources means that MSL must find efficiencies in order to continue to maintain or improve services to meet user demands; there are efficiencies to be gained by utilizing information systems

maintained by others.

Benefits: MSL staff benefit by having the resources we need to carry out our work without overextending limited personnel and financial resources. Further benefits may be found through the creation of new collaborative opportunities discovered as this goal is pursued. MSL partners and patrons benefit by having reliable access to high quality content and services. Montana taxpayers benefit through tax savings associated with appropriate use of IT in government

Risks: External information technology resources must be flexible enough to meet MSL business needs as well as State information security standards. External resources may not be available in a time frame to meet MSL needs.

Critical success factors:

- MSL will evaluate the SMCD to determine if adoption of SITSD solutions are affordable and will meet MSL IT needs;

- Based on the outcome of the Montana Shared Catalog (MSC) Request for Proposal, MSL will implement new services offered by the current vendor, SirsiDynix or migrate to a system managed by the selected vendor;

- If the option exists, MSL and other MSC libraries will pilot the services offered by OCLC World Share.

Supporting Objective/Action

Objective 1-3   Use the agency work plan process to identify priorities for new and/or expanded information systems

Business driver: Limited and/or reduced personnel and financial resources means that MSL must find efficiencies in order to continue to maintain or improve services to meet user demands; there are efficiencies to be gained by strategically planning future MSL goals and objects and by aligning information systems to support those goals and objectives.

Benefits: MSL staff benefit by clearly knowing agency priorities for current and future goals and by having the resources they need to achieve those goals without overextending limited personnel and financial resources. MSL partners and patrons benefit by having reliable access to high quality content and services with more unique resources to meet a broader array of user expectations. Montana taxpayers benefit through tax savings associated with appropriate use of IT in government.

Risks: Limited staff and financial resources mean that MSL staff must prioritize programs and services offered; certain opportunities may not be pursued if resources do not allow.

Timeframe: On-going on a biannual basis.

Critical success factors:

- MSL programs will develop biannual work plans that align with MSL's newly adopted strategic plan. Work plans will identify measurable goals and objectives as well as resources, including IT resources need to successfully accomplish the

goals.

Supporting Objective/Action

Objective 1-4 Encourage staff from all library programs to effectively collaborate across programs in order to use all library information system resources to meet the goals of MSL

Business driver: Limited and/or reduced personnel and financial resources means that MSL must find efficiencies in order to continue to maintain or improve services to meet user demands; there are efficiencies to be gained by taking advantage of the resources available in the unique programs managed by MSL.

Benefits: MSL staff benefit by having the resources we need to carry out our work without overextending limited personnel and financial resources. Further benefits may be found by effectively collaborating across programs as this goal is pursued. MSL partners and patrons benefit by having reliable access to high quality content and services with more unique resources to meet a broader array of user expectations. Montana taxpayers benefit through tax savings associated with appropriate use of IT in government.

Risks: Limited staff and financial resources mean that MSL staff must prioritize programs and services offered; certain opportunities may not be pursued if resources do not allow.

Timeframe: Ongoing

Critical success factors:

- MSL will share expertise that exists in a variety of programs for the benefit of all staff;
    - o MSL will launch a map application to report staff programming activity from the Statewide Library Resources Division;
    - o MSL will launch a training portal that will promote trainings available from all MSL programs;
- MSL is able to offer enhanced and new services and content to its users, ultimately benefitting local communities and libraries

Goal Number 2: Develop and maintain current and new information systems that are properly aligned with MSL program and service needs

IT Goal 2 Develop and maintain current and new information systems that are properly aligned with MSL program and service needs

Description: This on-going goal ensures the development and maintenance of information systems that are properly aligned with MSL program and service needs and appropriately deploys information technology solutions within the scope of MSL strategic plan and personnel and financial resources.

Benefits: MSL staff benefit by having the resources we need to carry out our work without overextending limited personnel and financial resources. Information systems and the associated resources are clearly justifiable; therefore personnel and financial resources are made available to ensure the long term success of the information systems. MSL partners and patrons benefit by having reliable access to high quality content and

services. Montana taxpayers benefit through tax savings associated with appropriate use of IT in government.

Which state strategic goal(s) and/or objective(s) does your goal address? 1, 2, 3, 4, 5

Supporting Objective/Action

Objective 2-1   Maintain the MSL information technology plan

Business driver: Limited and/or reduced personnel and financial resources means that MSL must prioritize programs and services; thoughtful consideration to the corresponding information systems is a critical element for successful strategic planning.

Risks: None

Timeframe: Ongoing

Critical success factors:

- MSL with the state IT planning cycle;
- MSL's information technology expenditures in this period align with the agency IT plan and the State of Montana Information Technology Plan.

Supporting Objective/Action

Objective 2-2   Participate in IT governance

Business driver: MSL must participate in IT governance and collaborate with communities of interest due to limited resources as well as the rapid pace of change in political and technological environments. Because of our size and scope, MSL also has a unique opportunity to influence the development of the state technology environment.

Benefits: MSL will benefit from improved IT management through best practices, peer networking, collaborative problem solving and cost effective IT resource allocation through collaborative purchasing and services development.

Risks: Limited staff means that MSL cannot participate at all levels of IT governance.

Timeframe: Ongoing

Critical success factors:

- Director or agency CIO attends IT Board meetings, meetings of the E-Government Advisory Council and chairs the Montana Land Information Advisory Council;
- CIO attends IT Managers Council;
- Geographic Information managers attend GIS Managers Forum and the ESRI Enterprise License Agreement Managers Group;
- Web Manager and web programmers attend Web Developers meetings;
- MSL will be involved in future IT committees and communities of interest;
- MSL will be involved with local library efforts to collaboratively address limited resources in this area.

Supporting Objective/Action

Objective 2-3   Consult with Department of Administration when evaluating new information systems to support the MSL Strategic Plan

Business Drivers: Overall changes in Library industry and patron expectations may be new to the Department of Administration (DOA), and in some cases at odds with the State IT infrastructure. In these instances communication with DOA is critical to MSL business success.

Benefits: Montana taxpayers benefit through tax savings associated with appropriate use of IT in government. MSL partners and patrons benefit by having access to high quality content and services. MSL staff benefit by having the resources we need to carry out our work.

Risks: Failing to consult with Department of Administration may introduce time delays or additional costs. Compliance with SITSD recommendations may reduce MSL's ability to meet industry standards or patron/partner expectations.

Timeframe for completion: Ongoing

Critical Success Factors:

- MSL information technology projects receive endorsement or approval by SITSD;
- MSL solutions are cost effective, timely and meet industry standards as well as patron/partner needs and expectations.

Supporting Objective/Action

Objective 2-4   Comply with all relevant Enterprise IT standards and policies that align with MSL business needs and support MSL programs and services

Business Drivers: MSL must comply with the Montana Information Technology Act.

Benefits: Montana taxpayers benefit through tax savings associated with appropriate use of IT in government. Government employees, library patrons, citizens and businesses benefit by having reliable access to high quality content and services. MSL employees benefit by having an IT infrastructure that is secure and reliable in order to carry out our work.

Risks: Compliance may result in reduced flexibility to meet patron and partner expectations. Noncompliance may result in increased control from SITSD.

Timeframe for completion: Ongoing

Critical Success Factors:

- MSL passes compliance audits;
- MSL is able to negotiate exceptions to Enterprise standards when needed to meet industry requirements or patrons' expectations.

Supporting Objective/Action

Objective 2-5   Implement Project Management as a means to proactively manage

information systems and projects

Business Drivers: Limited and/or reduced personnel and financial resources means that MSL must find efficiencies in order to continue to maintain or improve services to meet user demands; project management is a planning and implementation tool that is designed to find and create efficiencies through more effective project planning and oversight.

Benefits: Montana taxpayers benefit through tax savings associated with appropriate use of IT project management in government. MSL partners and patrons benefit by having access to high quality content and services that are more efficiently provided. MSL staff benefit by having the resources we need to carry out our work which is more efficiently managed through project management.

Risks: Project management requires a commitment of already limited personnel time and financial resources however efficiencies to be gained have been shown to outweigh the costs.

Timeframe for completion: Ongoing

Critical Success Factors:

- MSL will purchase a project management tool in FY2014;
- MSL will take steps to integrate current tools including our timesheet database into a project management tool to streamline time management, budget management, and contract reporting;

Supporting Objective/Action

Objective 2-6   Proactive management of hardware and software assets

Business Drivers: Proactive management of hardware and software assets is essential to assure continuity of services provided to MSL employees, patrons and partners.

Benefits: Proactive management of hardware and software assets ensures that MSL staff has a stable desktop computing environment as well as a stable, secure data center. MSL partners and patrons benefit by having reliable access to high quality content and services provided through stable information systems. Montana taxpayers benefit through tax savings associated with appropriate management of hardware and software assets.

Risks: Reduced financial resources means that MSL may not have the financial resources necessary to keep up with replacement cycles, maintenance plans or warranties. Some patron services may be compromised if systems go out of warranty.

Timeframe for completion: Ongoing

Critical success factors:

- MSL staff maintain current documentation on all systems and applications;
- MSL staff maintain and review back-up routines monthly;
- MSL staff develop, maintain and test fail-over systems for critical information systems;
- MSL ensures that all business critical hardware and software assets are protected

by maintenance plans and warranties;

- MSL replaces hardware on a five-year cycle and software as needed and as budget allows;
- MSL maintains software license compliance across all MSL platforms;
- MSL invests in mobile technology including maintenance and upkeep of the Library Technology Petting Zoos.
- MSL invests in accessible mobile technology to support the needs and training of patrons with visual and physical disabilities.
- MSL invests in the maintenance and upkeep of the travelling laptop labs and the desktop training lab.

Goal Number 3: Expand and improve online information services

ITG 3   Expand and improve online information services

Description: Expand and improve online information services that support MSL programs and services, and the programs and services of MSL patrons, partners and related communities of interest.

Benefits: MSL staff, Montana's libraries, government employees, citizens and businesses obtain high quality information services via the web.

Supports/Implements State IT Goals: 1, 2, 3, 4, 5

Supporting Objective/Action

Objective 3-1   Improve the overall design and usability of MSL websites and services

Business driver: MSL makes available a significant amount of information data and services via the web. The addition of the BMSC as a program merged with NRIS increases the amount of information served and requires us to carefully consider how we represent that new program to the world. The usability of the MSL websites must be carefully considered to ensure that our web presence effectively delivers this information to MSL patrons and partners.

Benefits: MSL staff, Montana's libraries, government employees, citizens and businesses obtain high quality information services via the web no matter their location or means of access.

Risks: Limited MSL staff to manage web presence means that to implement this goal, other MSL priorities may have to be put on hold.

Timeframe: Launch new MSL website by July 2013

Critical success factors:

- By July 2013 launch new MSL website that uses the new State of Montana template, that is reorganized to focus on content rather than MSL programs, that provides mobile device access MSL information and services, that is easier and more convenient for staff to administer, and that incorporates web 2.0 technology;

- Launch a new web presence for the combined NRIS and BMSC that focuses on content and services and that meets the demands of users for data delivery;

- Provide on-going training for MSL staff on the use of mobile, cloud and social media tools;

- Launch and maintain a new MSL Statewide Library Resources Training Portal;

- Launch and maintain a new Statewide Library Resources overall portal from the main MSL website.

Supporting Objective/Action

Objective 3-2   Participate in formal State activities that actively support online service delivery

Business driver: MSL must participate in formal State activities and must collaborate with communities of interest due to limited resources as well as the rapid pace of change in users' expectations for online services. Because of our size and scope, MSL also has a unique opportunity to influence the development of the state web environment.

Benefits: MSL will benefit from improved web management through best practices, peer networking, and collaborative problem solving.

Risks: None

Timeframe: Ongoing

Critical success factors:

- State Librarian or CIO will sit on the E-Government Advisory Council;

- MSL staff will participate in the GIS Manager's Forum;

- MSL staff will participate in the State Web Developer's meetings;

- MSL staff will continue to rely on the Network Advisory Council, the Montana Land Information Advisory Council, and the NRIS Advisory Council's expertise to shape MSL online services for our patrons and partners.

- MSL staff will participate in national forums and communities whose focus is the growth of delivery of online services, keeping up to date with emerging technologies, issues and standards.

Supporting Objective/Action

Objective 3-3   Collaborate with partners on projects and services which increase citizen access to public information and library content

Business driver: MSL patrons and partners demand that information and services be made available via the web. Collaboration with partners will enable us to increase citizen access to public information and library content in ways that is most meaningful to key constituents and in a manner that is most cost effective.

Benefits: MSL will benefit from improved web management through best practices, peer networking, and collaborative problems solving.

Risks: None

Timeframe: Ongoing

>## Supporting Objective/Action
Objective 3-4   Provide online interfaces that enable partners to contribute feedback regarding MSL projects and services as well as content to MSL collections

Business driver: MSL patrons and partners use social media to communicate share and discover information. MSL must participate in this environment to remain relevant to patrons and partners.

Benefits: MSL staff, Montana's libraries, government employees, citizens and businesses obtain high quality information services via the web no matter their location or means of access. In the web 2.0 environment, these same constituents have the ability to share information, comment on information, provide feedback to MSL about MSL programs and services, and ask questions and receive information from MSL staff.

Risks: There is some concern regarding the risk to information systems security as a result of the use of web 2.0 technology.

Timeframe: Ongoing

Critical success factors:

- Continue to increase the use of social media that enable user participation in the activities of MSL and that allow for the contribution of user feedback and content.

- Create easy to access evaluation tools via the MSL SLR training portal and MSL webpage

>## Supporting Objective/Action
Objective 3-5   Create and deliver web services to serve MSL data and the data of MSL partners

Business driver: MSL patrons and partners, particularly those in state and federal government, rely on web services as a means to cost effectively manage and consume data.

Benefits: MSL staff, Montana's libraries, government employees, citizens and businesses obtain high quality information services via the web.

Risks: There is some concern regarding the risk to information systems security as services are consumed.

Timeframe: Ongoing

Critical success factors:

- MSL will develop common applications and web services to better serve

MSL information resources. Examples include a new release of the
Montana Digital Atlas application;

- MSL will develop common delivery mechanisms for all Montana Spatial
Data Infrastructure layers maintained by MSL including web services that
meet the needs of MSDI users;
- MSL will review, implement, and support products and services used for
remote authentication to provide user access to third-party content
providers.

Goal Number 4: Develop business continuity and security programs

ITG 4   Develop business continuity and security programs

Description: MSL will develop business continuity and security programs that ensure
the integrity of MSL data, protect the privacy of patron information and ensure that MSL
services will be available in a timely manner in the event of a disaster.

Benefits: MSL staff benefit by having confidence that critical data is maintained and
available in the event of information system breakdown. MSL partners and patrons
benefit by having reliable access to high quality content and services which are only
minimally impacted in the event of information system breakdown. Montana taxpayers
benefit through tax savings associated with appropriate use of IT in government which
includes appropriate resource management afforded through business continuity and
security programs.

Which state strategic goal(s) and/or objective(s) does your goal address? 1, 3, 4

Supporting Objective/Action

Objective 4-1   Implement a NIST-compliant Information System Security Program

Business driver: MSL manages a significant number of information systems that
contains and serves proprietary data and/or that provide critical services to MSL partners
and patrons around Montana and beyond. Without an information system security
program in place, MSL runs the risk of losing data and infrastructure to support these
critical services.

Benefits: MSL staff benefit by having confidence that critical data is maintained and
available in the event of information system breakdown. MSL partners and patrons
benefit by having reliable access to high quality content and services which are only
minimally impacted in the event of information system breakdown. Montana taxpayers
benefit through tax savings associated with appropriate use of IT in government which
includes appropriate resource management afforded through business continuity and
security programs.

Risks: Limited MSL staff to manage information system security means that to
implement this goal, other MSL priorities may have to be put on hold.

Timeframe: Ongoing

Critical success factors:

- Within the scope of available resources, MSL will address critical needs identified by STISD's Security Manage Group.

Supporting Objective/Action

Objective 4-2   Continue to use D-Plan (http://www.dplan.org/) to develop an agency wide disaster recovery plan

Business driver: MSL manages unique (and in some cases one-of-a-kind) print collections as well as a significant number of information systems that contain and serve proprietary data and/or that provide critical services to MSL partners and patrons around Montana and beyond. A disaster recovery plan is critical to define salvage and recovery priorities and to guide emergency response in the event of a disaster.

Benefits: MSL staff benefit by having confidence that critical collections and data are maintained and available in the event of a disaster. MSL partners and patrons benefit by having reliable access to high quality content and services which are only minimally impacted in the event of disaster. Montana taxpayers benefit through tax savings associated with appropriate use of state resources and IT in government which includes appropriate resource management afforded through a disaster recovery plan.

Risks: Limited MSL staff to manage a disaster recovery plan means that to implement this goal, other MSL priorities may have to be put on hold.

Timeframe: MSL will have a complete disaster recovery plan by December 2012. A disaster recovery team will be trained by July 2013.

Critical success factors:

- MSL collections will be evaluated and rated for salvage priorities;
- MSL staff will be trained regarding how to respond to disasters;
- MSL will collaborate with other similar agencies including the Montana Historical Society Research Center to determine ways to support mutual needs in this area.

Goal Number 5: Improve MSL's ability to attract and retain a qualified IT workforce

ITG 5   Improve MSL's ability to attract and retain a qualified IT workforce.

Description: The agency will take steps to improve recruitment and retention of IT personnel.

Benefits: MSL's IT staff benefit through opportunities for career growth, learning, and professional development. Employees are recognized, valued, and respected for the contributions they make and are compensated fairly for their work. MSL also benefits through a decreases in employee turnover and loss of organizational knowledge.   And critical MSL information systems areas are managed with cross-trained support.

Supports/Implements State IT Goals : 1,2, 3, 4,

Supporting Objective/Action

Objective 5-1   Use IT staff in ways that support the MSL Strategic Plan and promote opportunities for collaboration and cross-training both among internal colleagues as well as with MSL partners

Business Drivers: MSL must increase efficiencies through creative opportunities for collaboration and cross-training due to shortage of FTE in IT support.

Benefits: MSL benefits from backup support for critical functions and from efficiencies gained by pooling talents. MSL patrons benefits by having reliable access to MSL programs and services that is not impacted by insufficient IT support.

Risks: Current organizational funding model inhibits cross program collaboration.

Timeframe for completion: Ongoing

Critical Success Factors:

- MSL will continue to implement best practices for documentation, services architecture and other components for successful IT support become institutionalized;

- MSL staff report a benefit from increased opportunities for collaboration among IT personnel;

- Staff and patrons report benefit from improved responsiveness to IT service requests.

Supporting Objective/Action

Objective 5-2   Develop MSL IT staff through investment in training and professional development. Implement training plans for employees that align with MSL's projected information system needs.

Business Drivers: MSL often finds it difficult to retain IT employees particularly due to low wages compared to market rates; staff turnover results in loss of organizational knowledge, slow response to IT service requests and inability to pursue MSL goals and objectives that have significant IT components.

Benefits: Opportunities for training and professional development are positive rewards and incentives for staff in lieu of financial compensation. Professional development and training often leads to greater opportunities for collaboration and to find work efficiencies.

Risks: MSL may not have financial resources to provide training opportunities for all IT workers. MSL may not be a large enough agency to implement competency-

based pay or career ladders for IT employees.

Timeframe for completion: Ongoing

Critical Success Factors:
- MSL IT staff complete a minimum of one training course and/or attend at least one professional conference that supports MSL programs and services annually;
- Annual performance reviews document training plans;
- MSL programs and services benefit from reduced employee turnover.

SECTION 5: IT INITIATIVES (FY2012 – FY 2017)

Initiative 1   State Publications Digitization Project

Description: By the end of FY12 MSL will have spent approximately $172,000 on a long-term project to digitize our legacy print state publications collection. To date these funds have come from the existing MSL budget. Digitization has vastly increased the use of state government information by making it available through our online catalog and commercial search engines. Furthermore, the print copies are protected from further damage or loss. The Montana State Librarian is considering an EPP request for $545,000 to finish digitizing the legacy print collection.

This initiative is directly to MSL IT Goal 3: Expand and improve online information services.

EPP Number NP011

(As yet unsubmitted)

SECTION 6: ENTERPRISE ALIGNMENT

Communities of Interest Participation

☑ Government Services

☑ Public Safety

☑ Human Resources

☑ Environmental

☑ Education

☑ Economic

☑ Cultural Affairs

☑ Finance

Our mission to provide library services and access to state government information to state employees and the public supports all these communities of interest. And we are pleased to support them. Specifically, the MSL State Publications Digitization initiative supports all communities of interest because the content contained in the State Publications collection reflects each of these communities. By digitizing state publications, information will be readily available to support work conducted by these communities of interest. Furthermore, MSL will make publicly available, any state publications produced by these communities of interest.

SECTION 7: PLANNED AGENCY IT EXPENDITURES

Expense Category	FY2012		FY2013		FY2014		FY2015		FY2016		FY2017
Personal Services	1,303,062		1,301,491		1,340,536		1,380,752		1,422,174		1,464,840
Operating Expenses	**502071**		561,531		569901		578396		587019		585771
Initiatives					272,500		272,500				
Other expenditures	572,338		575,677		584,313		593,077		601,973		611,003
Totals	2,377,471		2,438,699		2,767,249		2,824,725		2,611,167		2,671,614

SECTION 8: ADDITIONAL INFORMATION - OPTIONAL

Other types of information that support the agency's IT Plan. Some examples might include other COI participation, reference to other IT plans such as GIS plan, eGovernment plan, security plan, staffing issues and constraints, etc.